Since the early 90’s our Lab has pioneered the development of a variety of nanotechnologies intended to facilitate the transport of small and large drug molecules (peptides and polynucleotides) across the ocular mucosa. This knowledge has led to the design of the proposed delivery platform.

**Clinical Advisors & Collaborators**

- **Dr. Jesús Merayo** (Fernández-Vega Ophthalmology Clinic)
- **Dr. José Carlos Pastor** (IOBA)
- **SYLENTIS** (Pharmamar Group)

**Self-Assembled Polymeric Delivery Platform**

**KEY PHARMACEUTICAL PROPERTIES:**

- Small size (40-150 nm)
- Regulatory acceptable materials
- High reproducibility, versatility and drug association efficiency
- Capacity of co-encapsulation of different actives
- Easy to scale-up, mild & eco-friendly technology
- Able to be aseptically manufactured
- Freeze-dryable for final dosage form
- Stable during storage

**KEY BIOLOGICAL PROPERTIES:**

- Controlled release and stability in biological media
- Capacity to enhance the transport of the associated drug across the corneal epithelium (rabbit cornea)
- Interaction/penetration in living tissues
- Biocompatibility (rabbit eye)
- Corneal healing capacity

**MAIN BENEFITTING APPLICATIONS:**

- Topical treatments for surface-associated diseases, e.g., dry eye and corneal ulcers
- Intra-ocular treatments for inner eye diseases, e.g., macular degeneration and retina-associated diseases.

**Development Status**

Non-regulatory preclinical studies (oligonucleotide formulation, undisclosed indication)

IP rights until 2031